CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 88-099

ORDER AMENDING ORDER NO. 88-027 WASTE DISCHARGE REQUIREMENTS FOR

THE CITY OF MOUNTAIN VIEW AND LAIDLAW WASTE SYSTEMS SHORELINE REGIONAL PARK
CLASS III SOLID WASTE DISPOSAL SITE
MOUNTAIN VIEW, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

- 1. This Board, on February 17, 1988 adopted Order No. 88-027, updated Waste Discharge Requirements (WDR) for the City of Mountain View and Laidlaw Waste Systems pursuant to Title 23, Chapter 3, Subchapter 15 of the California Code of Regulations (Subchapter 15). Order No. 88-027 consolidated WDR's for two landfills owned by the City of Mountain View and operated by Laidlaw Waste Systems (hereinafter collectively called the discharger): Shoreline Regional Park, and the Stierlin Road Disposal Site (now referred to as the Ferrari site). By letter dated May 10, 1988 the discharger has requested that the WDR be revised.
- 2. The active portions of the Mountain View landfills (those areas allowed to accept for disposal non-hazardous Class III solid waste) were defined in Order No. 88-027 as the 150-Acre Parcel and areas of the Ferrari site that have been partially filled with refuse. Waste disposed in either of these two active portions of the landfill is placed only on top of wastes already in place. The remainder of the Mountain View Landfill is referred to as the 544-Acre Parcel. This portion of the landfill was closed prior to November 1984, the effective date of the revised Subchapter 15.
- 3. The Shoreline Amphitheatre, which was constructed in 1985 and is described in Finding 9 of the WDR's, has a concert season that runs between the months of April and November of each year. The discharger has stated that the experience of the past two years has shown that it is undesirable to dispose of refuse at the 150-Acre Parcel at times when there may be possible adverse environmental impacts on the neighboring Shoreline Amphitheatre, namely odors and dust.
- 4. During the 1987 Shoreline Amphitheatre concert season, in order to avoid impacting members of the public attending theatre events, the discharger moved landfill operations from the 150-Acre Parcel to the Ferrari site. However, there are constraints on the use of the Ferrari site for waste disposal which may preclude the discharger from landfilling there during the 1988 concert season. Because of the odor problems associated with use of the 150-Acre Parcel during the amphitheatre concert season, the discharger will need an alternative landfill site periodically through November 1988.

- 5. The discharger has explored the possibility of hauling refuse to other landfills but has not found this option to be feasible in the short term for one or more of the following reasons: (1) lack of capacity for the respective landfill owners' needs; (2) tonnage rate limitation in existing Solid Waste Facilities Permits (issued by the California Waste Management Board); (3) County Solid Waste Plan restrictions on out-of-County or out-of-subregion disposal; and, (4) the time constraint on direct hauling outside a limited radius.
- 6. The discharger has proposed to meet capacity needs during the remainder of the 1988 Shoreline Amphitheatre concert season by placing additional waste on top of existing landfill in an approximately 19 acre portion of the closed 544-Acre Parcel. This area, shown on Attachment A which is hereby incorporated as part of this Order, is located to the north of the Ferrari site and east of Stierlin Road. The site is of sufficient distance from both the Shoreline Amphitheatre and the development south of the Ferrari site such that landfilling operations are not anticipated to have a negative impact on either facility. The discharger proposes to place waste in the 19 acre portion of the 544-Acre Parcel intermittently during the 1988 Shoreline Amphitheatre season, when necessary to alleviate undesirable impacts on members of the public attending Amphitheatre events. The proposed maximum disposal rate is approximately 1300 tons/day.
- 7. The discharger has proposed, in the May 10, 1988 letter which is hereby incorporated as part of this Order, to fill the 19 acre portion of the 544-Acre Parcel by stripping off and stockpiling most of the final cover now in place, filling new refuse on top of old refuse, and re-covering with four feet of final cover pursuant to Article 8 of Subchapter 15. The estimated capacity for the proposed area is approximately 100,000 cubic yards, and would comprise approximately 5% of the total volume of waste in the 544-Acre Parcel. The discharger proposes to construct the landfill in the 19 acre portion of the site in accordance with the grading plan submitted on May 26, 1988, with minor modifications to allow for landfilling of a lesser amount of refuse than allowed for in the grading plan. This grading plan is hereby incorporated as part of this Order.
- 8. The discharger's proposal to open up a 19 acre portion of the 544-Acre Parcel would change the status of that portion from a closed landfill to an active, existing landfill as defined in Section 2510(d) of Subchapter 15. As discussed in Finding 25 of Order No. 88-027, pursuant to siting criteria in Section 2530(c) of Subchapter 15, existing landfills must be operated to ensure that wastes will be a minimum of five feet above the highest anticipated elevation of underlying groundwater.
- 9. Because the landfill has been constructed, as described in Finding 8 of Order No. 88-027, such that wastes have been placed below the elevation of the groundwater table, the proposed 19 acre landfill area does not meet the siting criteria specified by Section 2530(c) of Subchapter 15.
- 10. Section 2510(b) of Subchapter 15 states that alternatives to construction or prescriptive standards may only be approved where the discharger has demonstrated that: (1) the construction or prescriptive standard is not feasible as provided in subsection 2510(c) of Subchapter 15; and, (2)

there is a specific engineered alternative that is consistent with the performance goal addressed by the particular performance goal or prescriptive standard, and provides equivalent protection against water quality impairment.

- 11. Since it would be extremely costly to remove the wastes from the existing landfill for relocation, or to provide a five foot separation between the wastes and the shallow groundwater at the site, the discharger has applied for an exception to the siting requirement of Section 2530(c) pursuant to Section 2510(b) of Subchapter 15, for a 19 acre portion of the 544-Acre Parcel.
- 12. The Board finds that it is infeasible to meet the siting criteria for the area of the 544-Acre Parcel to be reopened for waste disposal during the 1988 Shoreline Amphitheatre concert season. The Board finds that the reasons for proposing to reopen this area cited in Findings 3, 4, and 5 of this Order are of sufficient merit to justify the disposal of approximately 100,000 cubic yards of refuse on top of refuse already in place in the northeastern portion of the 544-Acre Parcel and that an exemption is warranted pursuant to Section 2510(b) of Subchapter 15.
- 13. The discharger has proposed, as an engineered alternative to the five foot separation siting criteria, to prevent the migration of leachate from the active landfill area. The discharger will construct a leachate monitoring and collection system in the active landfill area in order to control and prevent the excess build-up of leachate within the existing fill area. Only those portions of the 19 acre area which actually receive wastes during the 1988 Shoreline Amphitheatre concert season will be defined as active, existing landfill. This system shall be designed as an effective means to control leachate at the site, to prevent the migration of leachate into the groundwater, and to protect the beneficial uses of the waters of the State. Compliance with this Order will provide for an evaluation of the effectiveness of the leachate control system and its ability to prevent leakage from the site.
- 14. Following adoption of Order No. 88-027 on February 17, 1988, it was appealed by Teledyne Semiconductor and Spectra-Physics, companies located south of the landfill whose names are mentioned in Finding 13 and Provision 14 of that order. The appeal was based on the fact that the companies were not given adequate time to review the wording of Finding 13 and Provision 14 prior to adoption of the order. As a result of this appeal, Finding No. 13 and Provision C.14 have been revised by this amendment.
- 15. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986, and this amendment implements the water quality objectives stated in that plan.
- 16. This Order governs maintenance of an existing facility and does not have a significant effect on the environment pursuant to Section 21084(a) of the California Environmental Quality Control Act and Section 15310 of the Resources Code.
- 17. The Board has notified the discharger and interested agencies and persons of its intent to amend waste discharge requirements, and has provided

them with an opportunity to submit their written views and recommendations.

18. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that this Board's Order No. 88-027 be amended as follows:

A.

1. Finding 13 is amended to read:

At this time, shallow groundwater quality is not monitored at the landfill. However, the shallow (10 - 30 feet below ground surface) and intermediate (40 - 70 feet below ground surface) zone aquifers upgradient of the landfill are monitored and contain volatile organic compounds (VOC's), primarily trichloroethene (TCE) and trans 1,2 dichlorothene (DCE). Cleanup and Abatement Order Nos. 86-011 and 86-012 have been issued to Teledyne Semiconductor and Spectra-Physics, respectively, for investigation of the extent of organic solvents in the groundwater and implementation of interim cleanup measures.

2. Finding 24 is amended to read:

The major portion of the 544-Acre Parcel is no longer used as a waste disposal site and is therefore considered to be closed. If wastes are placed in a portion of the 19 acre area of the 544-Acre Parcel as shown on Attachment A, that portion will be defined as existing, active landfill. Order No. 78-11 as amended by Order No. 81-26 specified that the entire 544-Acre Parcel was to be closed in accordance with Board adopted requirements by July 1, 1983. The discharger was to have submitted by August 15, 1983, a report prepared by a certified engineering geologist or registered engineer documenting that full compliance had been achieved according to the closure plan specifications. The discharger has not satisfactorily shown that the landfill was properly closed.

В.

1. Specification B.4 is amended to read:

Leachate control and monitoring facilities shall be installed in the 150-Acre Parcel, the filled portions of the Ferrari site, and the active, 19 acre portion of the 544-Acre Parcel. If necessary, additional leachate wells shall be installed in the inactive portion of the 544-Acre Parcel. Measures shall be taken to assure that leachate collection sumps and extraction wells will remain operational permanently.

2. Specification B.5 is amended to read:

The leachate monitoring and control system for the 150-Acre Parcel, the filled portions of the Ferrari site, and the active 19 acre

portion of the 544-Acre Parcel shall be maintained and operated to prevent the excess build-up of hydraulic head on the bottom of the landfill. The system shall be designed to prevent migration of leachate from the site. This system shall be inspected weekly, and any excess accumulated fluid shall be removed.

C.

1. Provision C.2 is amended to read:

The discharger shall submit a slope stability analysis by January 6, 1989 that evaluates the stability of the design slopes under static and pseudo-static loading conditions. This report shall address the potential for liquefaction at the site and the effect that liquefaction would have on the design features of the landfill, and all other requirements of Section 2595(f)(5) of Subchapter 15. If this stability analysis finds that the design of the landfill is not adequate for any reason, this report shall include an amended design, acceptable to the Executive Officer, that provides a new design assuring slope stability.

2. Provision C.10 is amended to read:

The discharger shall submit, by January 6, 1989, an evaluation of leachate build-up within all portions of the landfill, and a proposed leachate management plan. This plan should evaluate the quantity of leachate produced, the storage of the leachate, and the proposed disposal of the leachate. This management plan should also provide for an annual evaluation of the leachate generated at the site. If recirculation of the leachate is to be considered, the discharger must demonstrate that the quantity of leachate being recirculated will not exceed a solid to liquid ratio of at least 5:1 using a moisture content of the solid waste of at least 30%. The leachate management plan shall satisfy Section 2510 for exemption from Section 2530(c) of Subchapter 15 and be subject to approval by the Executive Officer.

3. Provision C.13 is amended to read:

The discharger shall submit, by October 21, 1988, a revised closure plan for the 150-Acre Parcel, the Ferrari site, and the active portion of the 544-Acre Parcel which will include, at a minimum, the following:

- a. a quality assurance/quality control program for construction of the final cover;
- b. proposed final grades;
- c. documentation of compliance with Specification B.10, B.11, and B.12, or a time schedule for achieving compliance;
- d. a water balance for the landfill to determine potential adverse impacts due to the proposed end use, and corresponding mitigative

design features that will ensure the physical and hydraulic integrity of the final cover;

- e. a detailed time schedule for closure of all portions of the landfill.
- f. a detailed design plan specifying how final cover for the 19 acre portion of the 544-Acre Parcel will be keyed into the final cover for the surrounding closed landfill.
- 4. Provision C.14 is amended to read:

Because the 150-Acre Parcel dewatering system described in Finding 15 serves to contain volatile organic solvents in upgradient groundwater and may contain leachate from the landfill, any phaseout or discontinuance of operation of the dewatering system should be coordinated with Teledyne and Spectra-Physics' implementation of their off-site extraction system. If the discharger intends to phase out or discontinue operation of this dewatering system, the discharger shall submit a technical report, pursuant to Section 13225(c) of the California Water Code, satisfactory to the Executive Officer at least 60 days prior to such phase out or discontinuance. This report shall describe efforts made by the discharger to coordinate the operation of the system with Teledyne and Spectra-Physics.

The following shall be added as Specifications of Order No. 88-027:

- 15. The 19 acre portion of the 544-Acre Parcel to be reopened for waste disposal during the 1988 Shoreline Amphitheatre concert season shall be closed pursuant to Article 8 of Subchapter 15. Final cover for this area shall be keyed into the existing cover for the closed portion of the 544-Acre Parcel surrounding the 19 acre portion. Grading and drainage for the 19 acre portion shall be coordinated with the grading and drainage of the surrounding landfill area that has been closed.
- 16. The 19 acre portion of the 544-Acre Parcel as shown on Attachment A shall only be used for landfilling during the 1988 Shoreline Amphitheatre concert season. Landfilling shall be in accordance with the submitted grading plan, with minor modifications to allow for a variation in the amount of refuse disposed at the 19 acre portion during the 1988 Shoreline Amphitheatre Season. Any minor modifications made in the grading plan shall be in accordance with Subchapter 15, and shall be made only in order to accomodate a lesser amount of refuse than originally planned for in the grading plan.

The following shall be added as Provisions of Order No. 88-027:

26. The discharger shall submit, by July 1, 1988 an operations plan for landfilling the 19 acre portion of the 544-Acre Parcel to be reopened for waste disposal. This plan shall describe how the 19 acre acre will be filled and shall include a proposal for protection of the active landfill area on days when not in use for waste

- disposal operations. The operations plan shall take into consideration the final grades to be achieved by the end of the concert season such that the grades are appropriate for closure and drainage control facilities.
- 27. The discharger shall submit, by January 1, 1989, a report documenting that the 19 acre portion of the 544-Acre Parcel has been closed in accordance with Subchapter 15, and that appropriate measures have been taken to key the low permeability cover material for that area into the cover of the surrounding landfill. The Executive Officer shall extend this submittal date only if weather conditions preclude closure from being finalized.
- 28. The discharger shall submit, by January 1, 1990 a report on the effectiveness of the leachate collection and removal system for the 150-Acre Parcel, the Ferrari site, and the 19 acre active portion of the 544-Acre Parcel. The methodology of preventing leachate migration from the site shall be evaluated in this report. If the system is not found to be effective to the satisfaction of this Board, other means of preventing migration of leachate from the site shall be investigated and implemented.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 15, 1988.

POGER B. JAMES Executive Officer

Attachment:

A. Site Map

